5.14 Public Services and Utilities

The Dos Colinas project site boundary is located within Local Facilities Management Plan (LFMP) Zone 15 of the Carlsbad Growth Management Program. Figure 5.1-4 (Section 5.1 Land Use) depicts the location of Zone 15 in relationship to other City of Carlsbad LFMP Zones. The following analysis is based on information provided in the City of Carlsbad Growth Management Program, Local Facilities Management Plan Amendment, Zone 15 (E) (City of Carlsbad, July 2010).

The purpose of the LFMP is to provide a plan and financing structure to ensure that facilities and public services are provided to accommodate development within Zone 15. The LFMP is prepared as a requirement of the City's adopted Growth Management Plan, and in accordance with Chapter 21.90 (Growth Management) of the Carlsbad Municipal Code and Citywide Facilities and Improvements Plan of 1986. The LFMP provides a phasing schedule to determine approximate threshold years for construction or upgrading various public facilities to maintain compliance with the performance standards adopted in the Growth Management Program. The City monitors development within the zone to ensure Growth Management Standards are maintained. The LFMP also contains general and special conditions of approval to ensure compliance with the performance standards. Public facilities addressed in this section and as required by the City's Growth Management Program include city administrative facilities, library, wastewater, parks, drainage, fire, schools, sewer, and water. Overall, the public facility demands are presently minimal and all Performance Standards are currently being met with the exception of drainage facilities.

Residential and non-residential build-out of Zone 15 will be much lower than the level that was anticipated in the originally adopted Zone 15 LFMP. This is attributable to properties being constructed and/or approved with less dwelling units than allocated, as well as certain properties being dedicated as habitat mitigation areas.

5.14.1 City Administrative Facilities

5.14.1.1 Existing Conditions

The City of Carlsbad currently owns or leases the following City Administrative facilities: 1) City Hall; 2) Redevelopment Department; 3) Community Development; 4) Public Safety and Service Center; and, 5) Water District Office. The City's adopted performance standard requires 1,500 square feet of administrative facilities per 1,000 population be scheduled for construction within a five year period. Currently, the project site generates a negligible demand for administrative facilities.

5.14.1.2 Thresholds for Determining Significance

Appendix G of the CEQA Guidelines is used to provide direction for determination of a significant public services and utilities impact from the proposed project. For the purpose of this EIR, a significant impact would occur if the proposed project would:

Result in substantial adverse impacts associated with the provision of new or physically altered
administrative facilities, the construction of which could cause significant environmental impacts to
maintain acceptable administrative services.

5.14.1.3 Environmental Impact

According to the LFMP Zone 15 (E), no specific conditions are required related to City Administrative Facilities. Existing facilities meet the performance standard, and the performance standard would continue to be met with implementation of the proposed project. Therefore, the proposed project would not require the provision of new or physically altered administrative facilities and no significant impact to the environment as a result of construction or expansion of administrative facilities will result.

5.14.1.4 Mitigation Measure

No mitigation measure is required, as no significant impact has been identified.

5.14.1.5 Impact After Mitigation

No significant impact to city administrative facilities has been identified.

5.14.2 Library Facilities

5.14.2.1 Existing Conditions

The City of Carlsbad currently owns or leases library facilities in four locations. The library performance standard requires 800 square feet of library space per 1,000 population be scheduled for construction within a five year period. Currently, the City's adopted performance standard for library facilities is being met and the vacant project site does not generate a demand on library facilities.

5.14.2.2 Thresholds for Determining Significance

Appendix G of the CEQA Guidelines is used to provide direction for determination of a significant public services and utilities impact from the proposed project. For the purpose of this EIR, a significant impact would occur if the proposed project would:

 Result in substantial adverse impacts associated with the provision of new or physically altered libraries, the construction of which could cause significant environmental impacts in order to maintain acceptable library services.

5.14.2.3 Environmental Impact

According to the LFMP Zone 15 (E), as the proposed project does not result in any additional demand which was not previously analyzed pursuant to growth projections of the original LFMP Zone 15, no specific conditions with respect to the provision of library facilities are required as a result of the project. Therefore, the proposed project would not require the provision of new or physically altered library facilities and no significant impact to the environment as a result of construction or expansion of library facilities will result.

5.14.2.4 Mitigation Measure

No mitigation measure is required, as no significant impact has been identified.

5.14.2.5 Impact After Mitigation

No significant impact to library facilities has been identified.

5.14.3 Sewer and Wastewater Facilities

5.14.3.1 Existing Conditions

Wastewater treatment in the City is provided primarily at the Encina Wastewater Authority (EWA) Plant and also to a lesser degree at satellite treatment facilities (the southern portion of the City is served by the Gafner Wastewater Reclamation Facility (Leucadia County Water District) and Meadowlark Reclamation Facility (Vallecitos Water District). Zone 15 is served by the EWA Plant. The project site is currently not served by sewer and there are no sewer facilities located on-site.

The City of Carlsbad Master Plan of Sewerage prepared by Dudek &Associates, dated March 2003 was the major source of information used to prepare the LFMP.

Sewer service in the City of Carlsbad is provided by three sewer agencies: City of Carlsbad, Leucadia County Wastewater District (LCWD), and Vallecitos Water District (VWD). The project site is located entirely within the City of Carlsbad sewer services area. Projects within Zone 15 are within the South Agua Hedionda sewer drainage basin and will be paying the sewer benefit area fees for this basin. Ultimately, all the sewerage generated by Zone 15 projects will be conveyed through the South Agua Hedionda Interceptor System to the Encina Water Pollution Control Facility. Carlsbad's current sewer Master Plan establishes 220 GPD/DU as the unit flow generation factor as a basis for projecting the average sewer flows for residential use.

The project site currently does not generate a demand for sewer and no sewer infrastructure exists on the project site. There are two existing gravity sewer lines in the vicinity of the project site. To the south of the project site is the South Agua Hedionda Trunk Sewer located along the south side of Agua Hedionda Creek. This is an 18-inch sewer main (SAHT 1E) which connects to an existing 24-inch gravity sewer line in El Camino Real. Sewer flow is toward Cannon Road.

The second existing facility in the vicinity of the project site is a 10-inch and 12-inch gravity sewer (SAHT 2C) which extends from the Calavera Hills development and connects to the existing South Agua Hedionda Trunk Sewer at the intersection of Cannon Road and El Camino Real.

5.14.8.2 Thresholds for Determining Significance

Appendix G of the CEQA Guidelines is used to provide direction for determination of a significant public services and utilities impact from the proposed project. For the purpose of this EIR, a significant impact would occur if the proposed project would:

• Require the construction of new sewer or wastewater facilities, the construction of which may cause significant environmental impacts.

5.14.8.3 Environmental Impact

Carlsbad's Sewer Master Plan establishes unit flow generation as a basis for projecting the average sewer flow. This flow is based on Equivalent Dwelling Units (EDUs) at a rate of 220 gallons per day (GPD). The projected buildout sewer flows for Zone 15, and the project site can be determined by multiplying the buildout EDU projections as established in the LFMP by the average EDU flow rate. Table 5.14-1 depicts the projected buildout average flows for the proposed project.

TABLE 5.14-1
Dos Colinas Buildout Sewer Flow Projections

| Land Use | Proposed Buildout (EDU) | Average Unit Flow (GPD/EDU) | Buildout Sewer Flow (GPD) |
|-----------------------------|----------------------------|--------------------------------|------------------------------|
| Residential - CCRC | 309 | 220 | 67,980 |
| Residential- Affordable | 29 | 220 | 6,380 |
| Housing Site | | | |
| TOTAL (DOS COLINAS PROJECT) | | | 74,360 |

Source: Local Facilities Management Plan, Zone 15, July 2010.

Notes: EDU = Equivalent Dwelling Unit GPD = Gallons Per Day

The trunk sewer system from Zone 15 to the wastewater treatment facility is complete. The project will be required to comply with the general and special conditions of the LFMP. Additionally, all development within Zone 15 will be required to pay appropriate connection fees. The existing sewer system serving development in Zone 15 currently meets the adopted performance standard.

The proposed project would not result in the generation of sewage in an amount that would exceed the capacity of the sewer infrastructure and treatment as contemplated for Zone 15. However, sewer improvements will be made in order to serve the proposed project. A majority of the proposed sewer infrastructure would be located within the project site boundaries, and the impacts associated with these improvements are included as part of the overall project grading and development footprint. Off-site sewer improvements are also proposed within the Rancho Carlsbad Estates Recreational parcel. Specifically, implementation of the project would include the construction of a sewer outfall primarily within Don Carlos Drive extending from the Dos Colinas property to the project site property. This proposed off-site sewer infrastructure improvement would cross Little Encinas Creek; however, the crossing would occur under the proposed rip-rap for the storm drain culvert crossing College Boulevard as analyzed and approved in the Calavera Hills Master Plan Phase II, Bridge and Thoroughfare District No. 4 & Detentions Basins (EIR 98-02, SCH No. 99111082) and associated regulatory permits.

As discussed in Section 5.6 Biological Resources of this EIR, no wetlands would be impacted as a result of this off-site sewer improvement.

5.14.3.4 Mitigation Measure

No mitigation measure is required, as no significant impact has been identified.

5.14.3.5 Impact After Mitigation

No significant impact to wastewater treatment and sewer facilities has been identified.

5.14.4 Park Facilities

5.14.4.1 Existing Conditions

The provision of park facilities in the City is addressed on a Park District basis. There are four Park Districts which correspond to the four quadrants of the City. The project site is located in the eastern portion of Park District 2. The Growth Management performance standard requires that three acres of Community Park or Special Use Area per 1,000 population within the Park District must be scheduled for construction within a five year period. Currently, the project site does not generate a demand for park uses.

5.14.4.2 Thresholds For Determining Significance

Appendix G of the CEQA Guidelines is used to provide direction for determination of a significant public services and utilities impact from the proposed project. For the purpose of this EIR, a significant impact would occur if the proposed project would:

Result in substantial adverse impacts associated with the provision of new or physically altered
parks, the construction of which could cause significant environmental impacts in order to
maintain acceptable park services.

5.14.4.3 Environmental Impact

The CCRC site is a conditional residential use that has been classified as commercial due to the medical and support services that will be provided to future residents residing in the senior living development. This commercial use is not anticipated to create a demand for park facilities based on Growth Management (LFMP) methodology for calculating facilities demands. Also, the CCRC facility will serve an older population, and will provide assisted living care to its residents. These CCRC units are not anticipated to create a demand for park facilities as would normally be associated with standard residential units. Private parks and open space areas will be provided within the CCRC site in order to serve the residents of the CCRC facility. Also, the project would allow for the continued use of recreational amenities by the RCE residents, including the tennis courts, bocci ball courts and garden plots.

The affordable housing site will include a total of 29 low-income dwelling units. Residents of the affordable housing development have the potential to create a demand for parkland facilities, however, the affordable site, in and of itself would not generate a demand for a new park, or an expansion of existing park facilities. With a total of 29 units and a population factor of 2.3178 per dwelling unit, the affordable

housing project would generate a demand for .2 of an acre of parkland. However, these residents would have access to ample existing and planned parkland in the northeast quadrant of the City.

According to the LFMP and Chapter 20.44 (Dedication of Land for Recreational Facilities) of the Carlsbad Municipal Code, the affordable housing component of the project would be required to pay park-in-lieu fees. According to Chapter 20.44 (Dedication of Land for Recreational Facilities) of the Carlsbad Municipal Code, "If the proposed subdivision contains fifty parcels or less, only the payment of fees shall be required except that when a condominium project, stock cooperative, or community apartment project exceeds fifty dwelling units, dedication of land may be required notwithstanding that the number of parcels may be less than fifty." The CCRC site contains less than 50 parcels. As such, the applicant, in lieu of dedicating land, shall pay a fee equal to the value of the land prescribed for dedication in Section 20.44.040 and in an amount determined in accordance with the provisions of Section 20.44.080.

The proposed project would not require the provision of new or physically altered parkland facilities and no significant impact to the environment as a result of construction or expansion of parkland facilities will result.

5.14.4.4 Mitigation Measures

No mitigation measure is required, as no significant impact has been identified.

5.14.4.5 Impact After Mitigation

No significant impact to park facilities has been identified.

5.14.5 Drainage Facilities

5.14.5.1 Existing Conditions

The Drainage Master Plan, entitled Master Drainage and Storm Water Management Plan for the City of Carlsbad, California (City of City, 1994), was the major source of information used to prepare the LFMP. The Master Plan was updated in July 2008 (Brown and Caldwell). The Drainage Master Plan identifies drainage systems necessary to meet the long-term needs of the City. The LFMP standard is that "major drainage facilities must be provided concurrent with development."

Zone 15 is located completely within the Agua Hedionda Lagoon watershed. The storm water within this watershed flows through natural drainage courses into Agua Hedionda Creek and Calavera Creek, or unnamed creek drainages, into the lagoon. Because Zone 15 and the project site are primarily undeveloped, existing, improved drainage facilities are limited. Table 5.14-2 depicts existing improved drainage facilities within or adjacent to the subject property in Zone 15.

TABLE 5.14-2 Existing Drainage Facilities

| Facility | Location |
|------------------|---|
| Improved channel | Agua Hedionda Creek. Just south of the southern Zone 15 boundary line, draining in a westerly direction, within Rancho Carlsbad Mobile Home Park. |
| Earth Channel | Calavera Creek. Rancho Carlsbad Mobile Home Park |
| BNB | An 84" RCP Constructed in Cannon Road |
| ВЈВ | A sedimentation basin at the N.E. corner of College Boulevard and Cannon Road |

Source: Local Facilities Management Plan, Zone 15, July 2010.

5.14.5.2 Thresholds for Determining Significance

Appendix G of the CEQA Guidelines is used to provide direction for determination of a significant public services and utilities impact from the proposed project. For the purpose of this EIR, a significant impact would occur if the proposed project would:

Result in substantial adverse impacts associated with the provision of new or physically altered
drainage facilities, the construction of which could cause significant environmental impacts in
order to provide acceptable drainage to the project site.

5.14.5.3 Environmental Impact

All future development in Zone 15 will be required to construct any future Zone 15 storm drain facilities identified in the current Drainage Master Plan and revised Drainage Master Plan for each watershed basin as determined by the City Engineer. Any facilities necessary to accommodate future development must be guaranteed prior to the recordation of the first final map, issuance of a grading permit or building permit, whichever occurs first in Zone 15.

Existing drainage facilities currently do not meet the adopted performance standard for major storm drain facilities. Table 5.14-3 summarizes the Zone 15 proposed build out facilities.

Future development will be required to construct any major drainage facilities identified in the current Master Plan at the time of development as determined by the City Engineer.

The project will be responsible for the construction of drainage improvements on-site, connecting to the other existing and planned facilities within Zone 15. Implementation of the proposed project would include off-site drainage improvements as identified in Section 3.0 Project Description of this EIR. Two potential storm drain alignments are under consideration. The first would convey runoff from the proposed senior community through the Rancho Carlsbad Golf Course to Agua Hedionda Creek. The second would avoid impacts to the golf course, and would connect to Agua Hedionda Creek where existing riprap is located on the banks and within the creek.

TABLE 5.14-3
Proposed Build Out Facilities

| Facility | |
|------------------------|---|
| BJ-1 (Retention Basin) | This system (little Encinas Creek) carries water from |
| | the City of Oceanside near Cannon Road. The |
| | natural flow will go through Basin BJ and will flow |
| | under College Boulevard in a 3' x 6' box culvert and |
| | join an earthen channel adjacent to Rancho |
| | Carlsbad Mobile Home Park which flows under El |
| | Camino Real to Agua Hedionda Lagoon. |
| BL-L | Removal of a headwall on an existing 78" RCP in |
| | College Boulevard, east of Sunny Creek Road and |
| | connect to Agua Hedionda Creek just downstream |
| | of the proposed College Boulevard Bridge. |
| BR | A 66" culvert under College Boulevard north of |
| | Bridge BL-L to drain an un-named creek coming |
| | from Cantarini and Holly Springs development. |

Note: Project B and BN are proposed City dredging projects for Agua Hedionda Creek (B) and portions of Calavera Creek (BN) to improve conveyance capacity of the channel for containment of the 100-year flood event through Rancho Carlsbad.

Source: Local Facilities Management Plan, Zone 15, July 2010.

With the exception of a small, temporary, impact related to biological resources, either drainage alignment would not involve a significant, physical impact to the environment. The biological impact associated with these improvements has been identified as less than significant (see Section 5.6, Biological Resources). Also, to the degree that these improvements would involve short-term impacts associated with construction activities, the impact has been addressed in previous EIR sections Air Quality, Noise, and Water Quality.

The project will be required to meet special conditions as identified in the LFMP Zone 15(E). Also, mitigation measures identified in preceding sections of this EIR would reduce the environmental impact associated with construction of drainage facilities on-site to a level less than significant.

5.14.5.4 Mitigation Measures

Mitigation measures identified in Sections 5.3 Air Quality (short-term construction), 5.5 Noise (short-term construction), 5.6 Biological Resources, and 5.12 Hydrology/Water Quality (short-term construction and long-term operational) will reduce the impact to the construction and operation of drainage facilities to a less than significant level.

5.14.5.5 Impact After Mitigation

Implementation of mitigation measures identified in Sections 5.3 Air Quality (short-term construction), 5.5 Noise (short-term construction), 5.6 Biological Resources, 5.7 Cultural Resources, and 5.12 Hydrology/Water Quality (short-term construction and long-term operational) will reduce the environmental impact associated with construction of drainage facilities to a level less than significant.

5.14.6 Fire Facilities

5.14.6.1 Existing Conditions

The project site is currently served by the City of Carlsbad Fire Station No. 3, located at 3701 Catalina Drive, and Station No. 5, located at the Public Safety Center on Faraday Avenue east of El Camino Real. The performance standard for fire facilities is "no more than 1,500 dwelling units outside of a five minute response time." A 30-mile per hour average driving speed is used to determine the five-minute response time. The five-minute response time begins when the fire truck leaves the fire station. This is equivalent to a 2.5 mile driving distance from the fire station. The project site is within the five-minute response time for Fire Stations No.3 and No. 5.

5.14.6.2 Threshold for Determining Significance

Appendix G of the CEQA Guidelines is used to provide direction for determination of a significant public services and utilities impact from the proposed project. For the purpose of this EIR, a significant impact would occur if the proposed project would:

Result in substantial adverse impacts associated with the provision of new or physically altered fire
facilities, the construction of which could cause significant environmental impacts in order to
provide acceptable response times to the project site.

5.14.6.3 Environmental Impact

The proposed project would be developed in order to ensure proper emergency access, including the provision of a second emergency access for the Rancho Carlsbad Estates, which would connect to College Boulevard. Also, the proposed project would provide fire hydrants and supporting water infrastructure in accordance with fire marshal requirements. Fuel modification zones would be provided in accordance with City requirements. According to the LFMP, there are no project-specific special conditions that are needed in order to meet the Zone's performance standard. The proposed project would not require the provision of new or physically altered fire facilities and no significant impact to the environment as a result of construction or expansion of fire facilities will result.

5.14.6.4 Mitigation Measure

No mitigation measure is required, as no significant impact has been identified.

5.14.6.5 Impact After Mitigation

No significant impact to fire facilities has been identified.

5.14.7 School Facilities

5.14.7.1 Existing Conditions

The proposed project is located within the Carlsbad Unified School District (CUSD). The CUSD is currently comprised of eight elementary schools, three middle schools (Aviara Middle School, Valley Middle School, and Calavera Hills Middle School - Grades 6-8), one high school, and one continuation/alternative programs academy. A majority of these schools are located within the Northwest Quadrant of the City,

which is the most densely populated. According to the CUSD, all schools are currently at enrollment capacity. No schools currently exist within Zone 15; however, Hope Elementary School and the Calavera Hills Elementary and Middle School are located within Zone 7 to the north of the project site. Kelly Elementary School is located east of the project site across El Camino Real within Zone 1. CUSD currently owns property north of the CCRC site which is proposed for the development of a high school.

The CUSD uses projection figures to estimate the projected number of students that will be generated by residential development within their service boundaries. These generation rates are shown below in Table 5.14-4.

TABLE 5.14-4
CUSD Student Generation Rate

| Student Level | Students Residential Unit |
|----------------------------|---------------------------|
| Elementary School (K-5) | 0.1708 |
| Middle School (Grades 6-8) | 0.0841 |
| High School (Grades 9-12) | 0.0733 |

Source: Carlsbad Unified School District, 2010.

5.14.7.2 Thresholds of Significance

Appendix G of the CEQA Guidelines is used to provide direction for determination of a significant public services and utilities impact from the proposed project. For the purpose of this EIR, a significant impact would occur if the proposed project would:

 Generate more students than the current Carlsbad Unified School District could accommodate, necessitating the development of new schools, the construction of which may cause significant environmental impacts.

5.14.7.3 Environmental Impact

All CUSD schools are currently at capacity. The anticipated senior living development on the proposed project site will not generate additional students within the CUSD. The affordable housing will comprise a total of 29 low-income dwelling units. The affordable housing development has the potential to generate additional students in Zone 15, causing a demand for school facilities. According the LFMP, special conditions are required for the project. These special conditions are as follows: 1) Conformance with the adopted school performance standard will be a prerequisite of any development within the zone. All development within Zone 15 will be conditioned to pay school fees in accordance with the requirement of the CUSD; and, 2) If CUSD determines development in Zone 15 will generate student demand prior to construction of new facilities, financial provision for temporary facilities on existing school sites will be required.

Utilizing the student generation rates as identified in Table 5.14-4, the proposed affordable housing project would generate approximately 5 elementary students, 3 middle school students, and 3 high school students, as shown in Table 5.14-5. While CUSD schools are currently at capacity, this amount of students would not generate the need to construct new schools or expand existing schools and the impact is considered less than significant.

TABLE 5.14-5
Proposed Project Student Generation

| Student Level | Students Residential Unit | Proposed Units | Estimated Students |
|----------------------------|---------------------------|----------------|-----------------------|
| Elementary School (K-5) | 0.1708 | 29 | 5 |
| Middle School (Grades 6-8) | 0.0841 | 29 | 3 |
| High School (Grades 9-12) | 0.0733 | 29 | 3 3 |

Source: Generation Rates, Carlsbad Unified School District 2010.

5.14.7.4 Mitigation Measures

No mitigation measure is required, as no significant impact has been identified. The project will be required to pay school fees in accordance with the requirement of CUSD.

5.14.7.5 Impact After Mitigation

No significant impact to school facilities has been identified.

5.14.8 Water Facilities

5.14.8.1 Existing Conditions

Water service in the City of Carlsbad is provided by three agencies: City of Carlsbad Municipal Water District (CMWD), Vallecitos Water District (VWD), and Olivenhain Municipal Water District (OMWD). Water service for Zone 15 is provided entirely by CMWD, which is the largest of the districts and provides service to the vast majority of the City. As discussed in the LFMP, the performance standard for water distribution is that water line capacity for any development within the zone must meet demands dictated by the CMWD. These demand standards are detailed below. Additionally, the LFMP states that prior to any development within the zone, a minimum 10-day average water storage capacity must be provided to the project site. Table 5.14-6 shows the seven existing CMWD major water facilities in Zone 15.

TABLE 5.14-6
CMWD Major Water Facilities in Zone 15

| Facility | Location | |
|-----------------------|--|--|
| 200 MG Squires, Dam I | NE Corner Zone 15 | |
| 27" Line | Southeasterly Portion Zone 15 | |
| 20" Line | El Camino Real | |
| 1 MG "C" Reservoir | North of future Cannon Road | |
| 14" Line In/Out | Line In/Out Parallel future Cannon Road | |
| 21" Lines | Northeasterly Portion Zone 15 T.A.P. Lines | |
| 36" Lines | East of El Camino Real to Sunny Creek Road | |

Source: Zone 15 LFMP, July 2010.

CMWD uses a Master Plan (2003 Water Master Plan Update) to evaluate the water systems within their district and to formulate long-range plans that will provide for future improvements. The Master Plan has established dwelling unit (DU) demand factors according to City General Plan land use designations as a basis for determining the projected average volume of water demand. The LFMP estimates the total projected water demand for the zone by multiplying the number of dwelling units projected at buildout by the average unit demand for each factored land use.

A. Carlsbad Municipal Water District – 2000 Urban Water Management Plan

The California Water Code requires all urban water supplies within the state to prepare urban water management plans and update them every five years. Recent amendments to the act now require that total projected water use be compared to water supply sources over the next 20 years in 5-year increments.

Currently, CMWD relies exclusively on imported water to meet potable water demands for residential, commercial, and industrial uses

Fire Flow Requirements

The CMWD Master Plan also outlines requirements for the flow of water to hydrants in case of a fire emergency. Anticipated demands are measured in gallons per minute (gpm), and are pursuant to recommendations from the City of Carlsbad Fire Department.

5.14.8.2 Thresholds for Determining Significance

Appendix G of the CEQA Guidelines is used to provide direction for determination of a significant public services and utilities impact from the proposed project. For the purpose of this EIR, a significant impact would occur if the proposed project would:

 Require the construction new water facilities, the construction of which may cause significant environmental impacts.

5.14.8.3 Environmental Impact

According to the LFMP, the water performance standard will be met in Zone 15. However, all future development in Zone 15 shall pay a major facilities fee based on water meter size to CMWD and any capacity charge levied by the San Diego County Water Authority. Water service for the CCRC portion of the project site would be obtained via connecting into the water infrastructure constructed as part of College Boulevard Reach "A." Specifically, the proposed CCRC portion of the project would be served by the 36-inch 490 Potable Water Pressure Zone water line in College Boulevard with a 16-inch and 12-inch loop system. The lower portion of the CCRC site would be served by a 12-inch 375 Potable Water Pressure Zone water line in College Boulevard with a 12-inch loop back to Cannon Road. The affordable site would connect to the existing water main off of Sunny Creek Road. To the degree that these improvements would involve short-term impacts associated with construction activities, the impact has been addressed in previous EIR sections Air Quality, Noise, and Water Quality.

The proposed project would not require the provision of new or physically altered water facilities outside the project site boundaries and no significant impact to the environment as a result of construction or expansion of new or altered water facilities outside the project site will result.

Water Supply Assessment

Under California Water Code Section 10912, a Water Supply Assessment would need to be prepared by the Carlsbad Municipal Water District if the project met one of several criteria. The project does not propose to develop more than 500 dwelling units, nor more than 500,000 square feet of commercial space or 250,000 square feet of office space. The project is not expected to employ more than 1,000 employees. The project has no hotel, motel, industrial, manufacturing or other related uses. Therefore, the preparation of a Water Supply Assessment is not required for the proposed project.

5.14.8.4 Mitigation Measures

No mitigation measure is required, as no significant impact has been identified.

5.14.8.5 Impacts After Mitigation

No significant impact to water facilities has been identified.

5.14.9 Energy

5.14.9.1 Existing Conditions

Currently, the project site generates a negligible demand for energy.

5.14.9.2 Thresholds for Determining Significance

Appendix G of the CEQA Guidelines is used to provide direction for determination of a significant public services and utilities impact from the proposed project. For the purpose of this EIR, a significant impact would occur if the proposed project would:

- Require the construction of new energy facilities, the construction of which may cause significant environmental impacts.
- Use of energy in a wasteful or unnecessary manner.

5.14.9.3 Environmental Impact

The California Environmental Quality Act requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy (see Public Resources Code section 21100(b)(3)). As discussed in Section 5.4 Greenhouse Gas Emissions of this EIR, operation of onsite development would consume an estimated 2,011,100 kWh/year of electricity for the proposed project. Additionally operation of the project would involve consumption of natural gas, and regular gas associated with automobile trips to and from the project site.

The proposed project will require the extension of electrical and natural gas infrastructure to serve the project site. However, the project will incorporate energy conservation measures beyond Title 24 energy standard requirements which will achieve at least a 15% energy savings. Therefore, the project does not include any components that would be considered unnecessary, wasteful, or inefficient in terms of energy consumption. In addition, energy infrastructure needed to support the project (e.g. natural gas, electricity) is available and the project would not require a substantial new source of energy. The proposed project would also involve the use of natural gas associated with building heating, cooking, and water heating; however, the project would utilize energy star or equivalent on all appliances. Project operations would also involve the use of gasoline associated with vehicle travel. While this represents an increase in the use of fossil fuels, the use of such fuels is not considered to be in a manner that is unnecessary or wasteful.

5.14.9.4 Mitigation Measures

No mitigation measure is required, as no significant impact has been identified.

5.14.9.5 Impacts After Mitigation

No significant impact to sewer facilities has been identified.